

Elementary School Site Requirements

- ☐ 12 useable acres for new schools is ideal. More than 12 acres may be needed due to terrain or for environmental protection requirements.
- ☐ Other considerations include road access, ability to extend sewer, water and other utilities, good topography, compatible adjacent land use.
- ☐ The site should be designed to provide a clear view of all play areas and to facilitate supervision from one location.
- ☐ A minimum of 70 parking spaces should be designed initially, with future expansion possible. At schools with a large number of itinerant staff, more parking spaces may be required.
- ☐ Protective fencing may need to be provided near heavily wooded areas, busy streets, steep hills, parking lots and turnaround areas.
- ☐ Metal drains/grates should not be located in the playing fields, paved play areas and mulched playground equipment areas.
- ☐ Paved areas and fields must be as level as possible. Water should not collect on paved areas or in mulched areas.
- ☐ Playground equipment areas should not be located at the bottom of hills unless a provision is made to channel water away from the equipment areas.

Driveway and Service Drive

- ☐ The driveway must be 24' wide, 50' radius for turnaround, for buses, with a separate entrance and exit or turnaround is required.
- ☐ Bus traffic should be separated from car traffic at all times, when possible. Bus loading zones should be able to accommodate the entire student body.
- ☐ All driveways must be arranged so that children do not cross them to get to the play areas. Access to the Head Start and future day care areas must be considered.
- ☐ Pedestrian access to the school facilities should be designed to make the best use of community rights-of-way and should not require students to cross in loading-zone areas.
- ☐ Driveway aprons are to be perpendicular to the centerline of the street; and if there is an intersecting street on the opposite side from the proposed driveways, the driveway apron is to line up with the intersecting street.
- ☐ The grade of the driveways shall not exceed eight percent and should provide for a minimum centerline radius of 50 feet to provide adequate turning space for buses.
- ☐ A service drive 15' wide with an adequate turnaround is required to service the kitchen, boiler room, and general delivery area.
- ☐ Where necessary, oil filler pipes, with adequate overflow pipes, are to be easily accessible for a tractor-trailer.

Playground Equipment Areas (mulched areas)

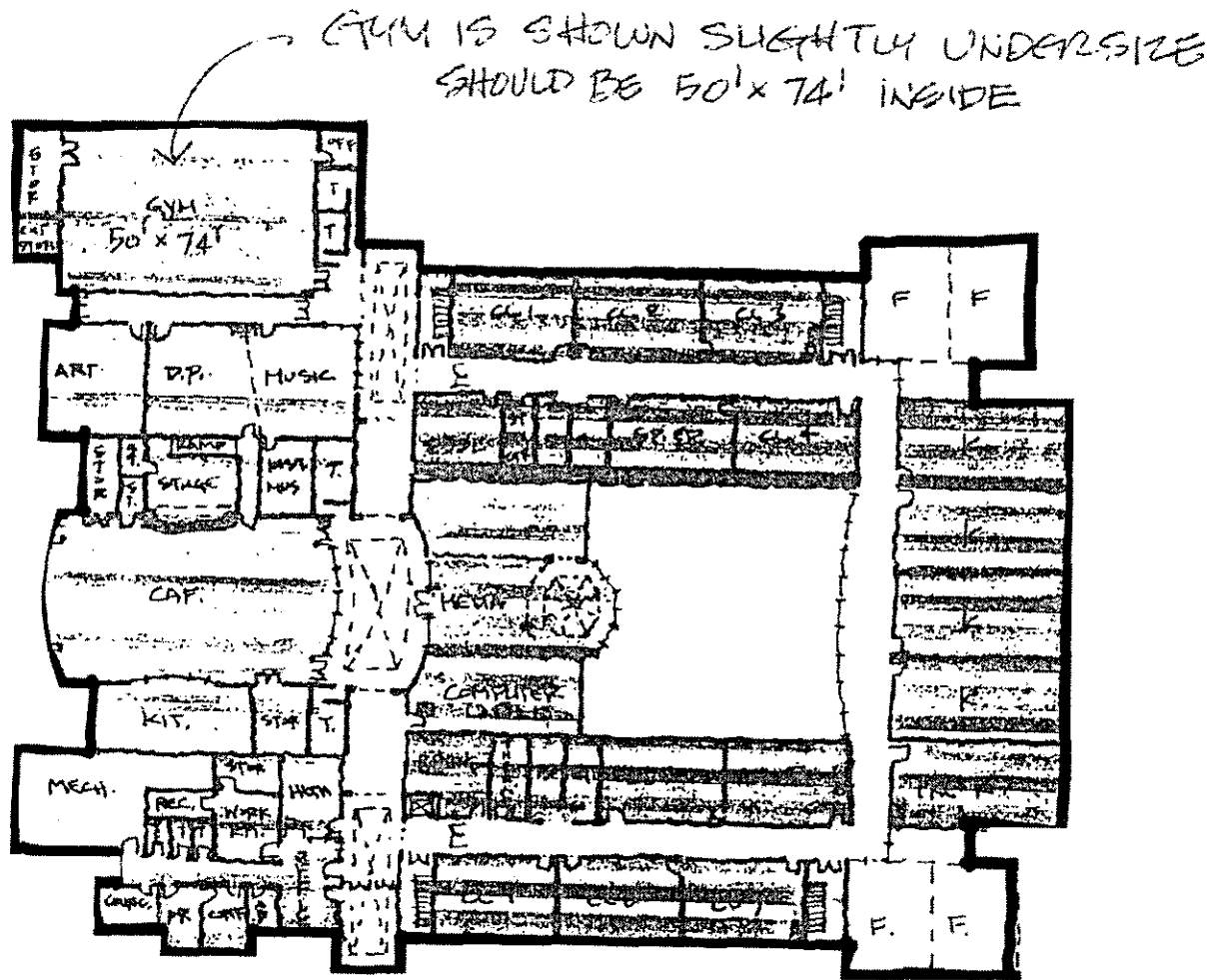
- ☐ One or two areas shall be provided near the playing fields and large paved play area for playground equipment.
- ☐ The area shall be level, bare ground, unseeded, and no sod. MCPS will provide equipment dimensions for these areas.
- ☐ An underground drainage system must be provided.
- ☐ The loose-fill surfacing material (such as Fibar or Woodcarpet) must meet ADA requirements. A border must be provided to contain the filler. The surfacing materials must meet or exceed safety specifications for shock absorbing qualities as outlined by US CPSC.

Kindergarten Play Area (mulched area)

- ☐ A kindergarten play area of 45' x 60' should be located adjacent to the kindergarten paved play area described in the physical education section for playground equipment.
- ☐ The area shall be level bare ground, unseeded, and no sod. MCPS will provide equipment dimensions for this area.
- ☐ Protective fencing should enclose the area.
- ☐ An underground drainage system must be provided.
- ☐ The loose-fill surfacing material (such as Fibar or Woodcarpet) must meet ADA requirements. A border must be provided to contain the filler. The surfacing materials must meet or exceed safety specifications for shock absorbing qualities as outlined by US CPSC.

Landscaping

- ☐ Planting should include screen planting and other planting needed for erosion control.
- ☐ Existing plant stock, if on site, is to be evaluated for use and protected accordingly.
- ☐ Landscaping to support energy conservation and to relate the building to the site with aesthetic appeal must be included.
- ☐ Planting areas along sidewalks and wooded and flowered areas are to be situated to enable the physical education program to be carried on without undue disturbance to the classrooms.
- ☐ Provision for outdoor watering must be included.
- ☐ The landscaping plan should include areas for outdoors environmental education programs.



NEW ELEM. SCHOOL PROTOTYPE PLAN
@ 1" = 50'

10/30/02

Middle School Site Requirements

- The architect should consider the architecture of the neighborhood in designing the building.
- The design should retain as many trees as possible in order to buffer the school and the playing fields.
- Pedestrian access must be provided from the surrounding neighborhoods.
- An unimproved area on-site should be designated to serve as an environmental study area in the future.
- A covered area for students in the bus loading area must be provided.
- Bike racks should be provided near the building.
- 20 useable acres (more than 20 acres may be needed due to terrain or for environmental protection requirements)

Driveway

- A separate entrance and exit or turnaround for buses with stacking for up to 20 buses at a time with a 24-foot minimum width and 50-foot minimum radius from the centerline of the roadway is required to maneuver a bus adequately.
- A student drop-off area also should be included.
- Driveway aprons should be perpendicular to the centerline of the street; and if there is an intersecting street on the opposite side from the proposed driveways, then the driveway apron should line up with the intersecting street, if possible.
- The grade of the driveways should not exceed eight percent.
- Care for safety of students must be exercised in developing the driveways including use of safety rails in the bus loading area.
- Parking spaces for 125 cars are to be provided. At least half of the parking area should be readily accessible to the gymnasium. Outdoor lighting for all parking areas and entrances must be adequate for safety and crowd control.
- An area for staff and parents to drop off heavy items from their car with easy access into the school must be developed.

Service Drive

- The service drive is required for the kitchen, boiler room, shops, and general delivery areas. 1
- 5' minimum width, with adequate turnaround is required.
- The service drive must be designed so that students do not need to cross the service drive to get to the play fields.
- If oil heat is provided, the oil filler pipes should be easily accessible for tractor-trailer with adequate overflow pipes.

Playing Fields

- One 400' x 400' playing field is required for general use.
- One 300' x 300' playing field with two sets of soccer goals should be installed
- 2 water fountains located on the outside of building near physical education courts and playing fields are required.

Softball Fields

- Four softball fields are required.
- 250' minimum radius with backstops are required—one with hood, benches, and safety fences.
- The baseline of the main field should be skinned and infield mix added.

Track And Field Area

- A long jump pit should be constructed.
- A short, 60-yard, 6-lane track for short distances and hurdle practice should be designed for track and field instruction. This track should be connected to a walking asphalt path around the perimeter of the fields.
- Several permanent trashcans should be provided in this area.

Basketball Courts

- Three courts fenced with six gooseneck posts with heavy-duty basketball backboards with goals should be installed.
- A three-level chinning bar should be placed near the black top area.

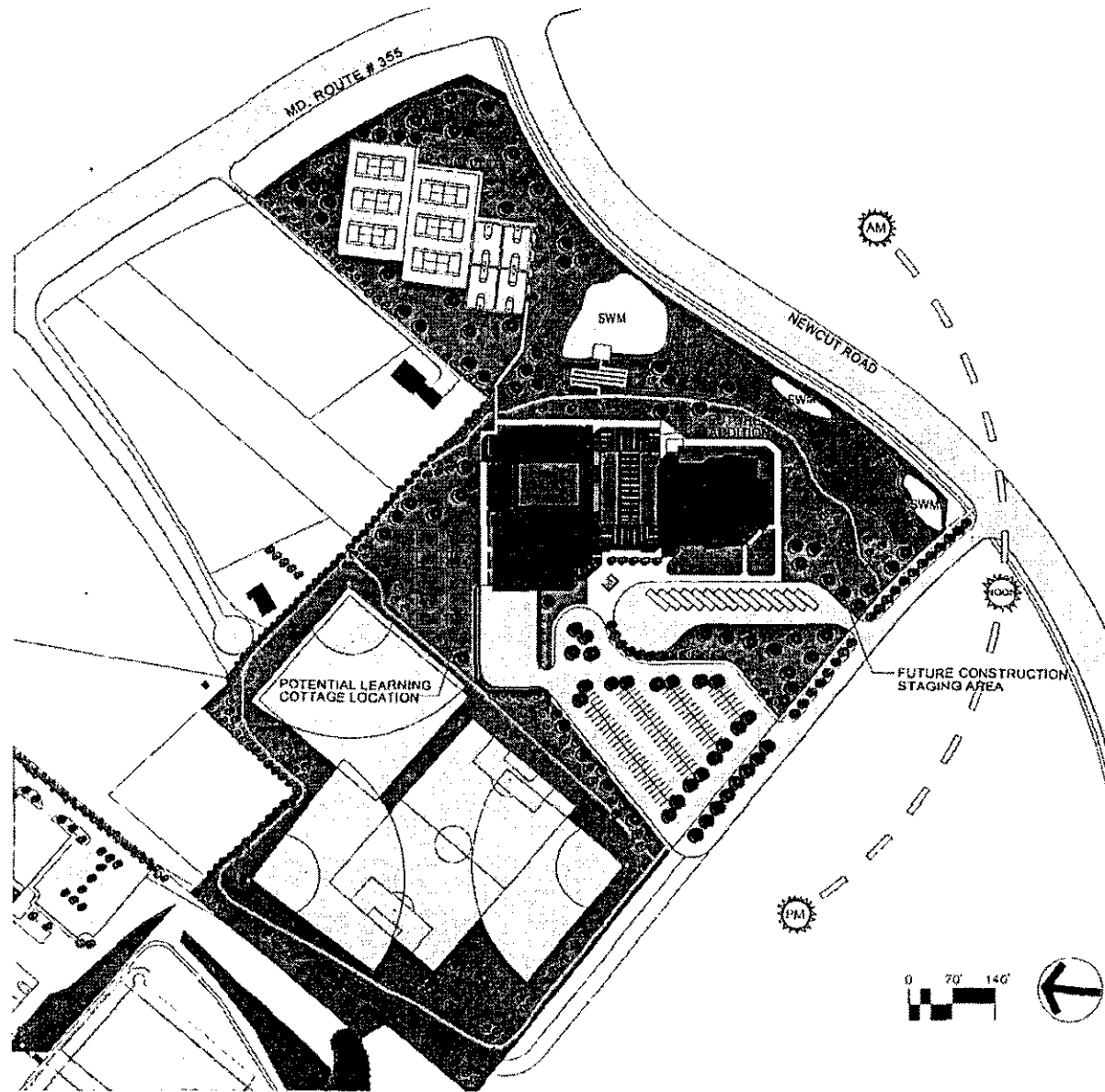
Paved Play Area

- One paved play area, 55' x 110', with all-weather surface play area should be provided near the cafeteria and separate from the other PE areas.

Tennis Courts

- Six tennis courts are required each with all-weather surfacing.
- One electrical outlet on the outside of the fence of on one court is required.
- Several benches and outside trashcans should be permanently installed.
- A common "rebound" wall contiguous with the tennis courts should be provided.

SITE PLAN



SITE PLAN

High School Site Requirements

- ☐ The architect must comply with Section 5-103 of the Maryland Natural Resources article in consultation with the Maryland Forest Service designating, if suitable, the area on site and type of reforestation or validating the need for off-site reforestation.
- ☐ One play yard, 1000 sq ft for the child development classroom is required.
- ☐ One outdoor patio, 500 sq ft for the art department is required.

Driveway

- ☐ Separate entrance and exit for buses with 24' minimum width and 50' minimum radius is required.
- ☐ Space for an appropriate number of buses (at least 20) to load at one time is needed.
- ☐ A covered area for students in the bus loading area must be provided.
- ☐ A separate drive for parent drop-off is required.

Parking

- ☐ Parking for 450 cars with master planning for additional 50 spaces.
- ☐ The parking area should be designed to maximize safety and minimize speed.
- ☐ Adequate lighting should be provided.
- ☐ Parking area should have two exits.
- ☐ Guardrails or bollards are to be installed to protect fields and play areas.

Service Drive

- ☐ 15' minimum width with adequate turnaround.
- ☐ All driveways must be arranged so that they are not required to cross the service drive to get to the play fields.
- ☐

Physical Education/Athletic Fields

- ☐ As many trees as possible should be retained in order to buffer the school and the playing fields.
- ☐ Pedestrian access must be provided from the surrounding neighborhoods.
- ☐ All fields should be graded and sifted to remove rock and debris.
- ☐ A 3" water line for future irrigation of playing should be installed.
- ☐ A system of handicapped accessible paths shall connect all of the field areas together.
- ☐ The path shall be 8 ft wide and constructed with 2-inch blacktop.
- ☐ These paths also will be used for long distance running.

Stadium Field

- ☐ The field should be properly crowned to provide adequate drainage. The location of the drains/covers must not interfere with the playing surface.
- ☐ The width and length of the field must accommodate soccer, field hockey, and football.
- ☐ The field should be surrounded by an eight-lane track with a 24-ft wide straightaway, backside, and curves.
- ☐ The straightaway must be located near the home side bleachers.
- ☐ A "REFLEX" polyurethane surface is to be provided for the track and field event runways.
- ☐ There should be raised curbing on the inside and outside of the track.
- ☐ A shot put, long jump and pole vault area is to be included.
- ☐ The discus area must have a required cage.
- ☐ If the track is separate from the stadium, than dedicated and permanent seating to accommodate spectators should be designed.
- ☐ The field should be situated to minimize the effect of afternoon sun glare on the players as they face diagonally, and from spectators in the main bleacher section.
- ☐ An underground water system with 9 zones, four heads each is required.
- ☐ Safe stadium seating is to accommodate 2000 spectators on home side, and 750 on visitor side is required. They must comply with NFPA 102 and ADA.
- ☐ All risers must be of uniform height with handrails at aisles, all aluminum boards, wheelchair parking, paved runway from track gate to bleacher, and paved under the bleachers.
- ☐ Permanent soccer/football goals with pads should be installed.
- ☐ A scoreboard for football, soccer, field hockey, and track and field events should be included.
- ☐ Lights are to be provided to illuminate and provide security for peripheral areas of the stadium field for evening activities.
- ☐ An outdoor storage shed of approximately 23' x 30' should be provided.

Varsity Baseball Field

- ☐ The dimensions of the baseball field should be 325' down each foul line and 360' for center field.
- ☐ Electrical service, water service, a stainless steel water fountain, hooded backstop, benches with safety fencing, and trash containers are to be provided.
- ☐ Equipment and fields must be in compliance with national, state, and local rules and safety standards.
- ☐ Seating for 50 spectators on each side should be provided.

- ☐ Field must be situated with a north-south orientation so that direct evening sun does not interfere directly with batter and fielders.
- ☐ The distance from the backstop to home plate must at a minimum comply with NFHS rules and regulations.

Varsity Softball Field

- ☐ The softball field requires a 250' radius.
- ☐ Electrical service, water service, stainless steel water fountain, hooded backstops, safety fences and benches, and trash containers are to be provided.
- ☐ Equipment and field must be in compliance with national, state, and local rules and safety standards.
- ☐ Seating for 50 spectators on each side should be provided.
- ☐ Field must be situated with a north-south orientation so that direct evening sun does not interfere directly with batter and fielders.
- ☐ The distance from the backstop to home plate must at a minimum comply with NFHS rules and regulations.
- ☐ An outdoor storage shed of approximately 20' x 20' should be provided near the baseball/softball fields.

Play Fields

- ☐ Three play fields, a minimum of 120,000 sq ft with 150' width should be provided.
- ☐ Proper drainage should be assured for all of the fields.
- ☐ Two softball non-hooded backstops are to be provided in the corners of the fields if space allows.
- ☐ Two 15' benches with safety fences on each field should be installed.
- ☐ Permanent trash containers are to be placed by the backstops.
- ☐ Two sets of multipurpose goal posts should be included on the fields—one should be permanent and the other moveable.
- ☐ Bermuda grass is best for all fields.
- ☐ The field hockey field should be 60 yards x 100 yards. Bermuda grass is required for this field. This field should not be crowned.
- ☐ Benches, goals, seating for 100 spectators, and permanent trash containers are needed at the field hockey field.
- ☐ A heavy duty vandal-proof outdoor water fountain should be provided adjacent to the practice fields separate from the stadium water fountain.

Paved Areas

- ☐ Four benches, a stainless steel water fountain, and permanent trash containers are to be provided beside the tennis/basketball courts.

Tennis Courts

- ☐ Eight full-sized tennis courts with cloth nets are required.
- ☐ Permanent posts and cranks are required.
- ☐ The baseline of the court should be perpendicular to the north-south axis.
- ☐ The playing surface color is green with red out-of-bounds.
- ☐ Appropriate tennis court markings should be provided.
- ☐ Fencing 10' high should surround the courts.
- ☐ An electrical outlet should be installed on the outside of the fence.
- ☐ A minimum 60' long and 10' high rebound wall should be located outside the court area.
- ☐ The tennis courts and wall are to be located near the outside basketball courts.
- ☐ The tennis court construction should meet the United States Tennis Court and Track Builders Association Guidelines.
- ☐ If the tennis courts are not located near the outdoor storage area, provision must be made to store maintenance supplies (squeegees), ball machines, and other tennis equipment.

Basketball Courts

- ☐ Four paved play areas, 80' x 100' with appropriate court markings should be provided.
- ☐ Each basketball court should be 46' x 80'.
- ☐ 8 basketball sets (post, backboard, rim, net) is required.
- ☐ The posts should be curved "goose neck" with fan-shaped aluminum backboards. Heavy duty double rims with polyethylene or strap nets must be provided.
- ☐ The basketball courts should be located next to the tennis courts.